

### **REMARKS**

Claims 1-15, 17-29, 31-35, and 37-60 are pending in this application. Applicant thanks the Examiner for the thorough consideration given the present application. Applicant also thanks the Examiner for allowing claims 19, 20, 37, 46, and 47.

Applicant further thanks the Examiner for the courtesy extended during a telephone interview on March 23, 2006 between the Examiner and Applicant's patent attorney Anthony G. Fussner (Reg. No. 47,582). During that telephone interview, the Examiner indicated that amending the claims to recite features relating to an axle having longitudinal adjustability while maintaining axle height would likely patentably distinguish the claims over the cited patents, including Townsend, U.S. Patent 6,163,986.

Accordingly, Applicant believes that independent claims 1, 17, 31, and 42 (as amended per this telephone discussion with the Examiner) are in condition for allowance. Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw the rejections and issue a notice of full allowance for this application.

### **CLAIM OBJECTION**

Claim 17 stands objected because of the informality that "the member's footprint" lacks antecedent basis. Applicant has made minor non-narrowing amendments to claim 17 to overcome this objection. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the objection to claim 17.

### **REJECTIONS UNDER 35 U.S.C. § 102**

Claims 1-4, 6-10, 13, 15, 17, 18, 21-24, 27, 29, 31, 32, 35, 38-42, 51-52, and 56-60 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Townsend, U.S. Patent 6,163,986. This rejection is respectfully traversed.

At the outset, Applicant submits that the amendments to independent claims 1, 17, 31, and 42 have rendered moot the rejection of independent claims 1, 17, 31, and 42 (and all dependent claims therefrom).

Independent claims 1, 17, 31, and 42 have been amended to clarify features relating to an axle having longitudinal adjustability that allows the axle longitudinal positioning to be changed without substantially changing the axle height. These features are not disclosed, taught, or suggested by Townsend. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the section 102(b) rejection of claims 1, 17, 31, and 42 (and all claims depending therefrom).

During a March 23, 2006 telephone conversation between the Examiner Thomas A. Beach and Applicant's attorney Anthony G. Fussner (Reg. No. 47,582), the Examiner indicated that the above claim amendments would likely patentably distinguish the claims over Townsend. Applicant agrees and submits the following in support thereof.

Townsend discloses a non-motorized manually driven snow blower 20. When Townsend's snow blower 20 is manually pushed forward, a wheel 21 rolling on the ground then actuates a drive mechanism 60 (gears, wheels, chains, belts), which, in turn cause brushes 56 (Figure 13) or small blades 50 (Figure 1) to spin for removing snow or dirt.

Townsend, however, lacks any disclosure, teaching, or suggestion that the axle of wheel 21 is longitudinally adjustable. The Office Action relies upon component 106 as the disclosure of a selectively adjustable axle. But this Townsend component 106 is a lever that can be used for adjusting the angle of the shoveling mechanism 40 (and its spinning blades 50) relative to the forward direction of travel. See, for example, Townsend column 5, lines 34 through 56, and the shoveling mechanism 40 respective positions shown in FIGS. 2 and 3. Applicant has not found any disclosure or teaching in Townsend that the wheel 21 has any longitudinal adjustability.

The claim amendments contained herein are supported by the application, as originally filed, see for example paragraphs [0026] and [0032] and FIG. 6 of

U.S. Patent Application Publication No. 2005/0160633. Applicant also respectfully submits that the claimed features relating to an axle having longitudinal adjustability were already subject to the Examiner's search in view of previously searched claims 52, 53, 57, and 60. Accordingly, Applicant does not believe a new search is necessitated nor warranted by the amendments relating to the adjustability of the axle attachment. Therefore, Applicant respectfully requests the Examiner to issue a notice of full allowance for this application.

Because Townsend fails to disclose an axle having longitudinal adjustability as recited in independent claims 1, 17, 31, and 42, Townsend cannot anticipate these claims. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the section 102(b) rejection of claims 1, 17, 31, and 42 (and claims depending therefrom).

Applicant has also amended independent claim 1 to further clarify that the, when the handle is pushed generally downwards, the blade springs generally upwards and forwards throwing the load of material briskly upward and away from the blade in response to a recoil through the fulcrum member at the axle of the wheel assembly and pivoting of the driving member about the axle of the wheel assembly.

Independent claim 17 has been amended to clarify that the shovel blade is configured to spring generally upwards and forwards throwing the material briskly upwards and away from the shovel blade in response to a recoil reaction through the fulcrum at the axle of the wheel assembly and pivoting of the elongate driving member about the axle of the wheel assembly when the handle is pushed downwards.

Independent claim 31 has been amended to clarify that the method includes at the destination, briskly applying a force at the handle of sufficient magnitude for pivoting the yoke about the wheel axle such that the shovel blade throws the load of material a substantial distance away from the apparatus in response to the pivoting of the yoke.

Applicant respectfully submits that these features also are not disclosed, taught, or suggested by Townsend. For these additional reasons, Applicant

respectfully requests reconsideration and withdrawal of the section 102(b) rejection of claims 1, 17, 31, and 42 (and all claims depending therefrom).

As noted above, Townsend discloses a non-motorized or manually driven snow blower 20. When Townsend's snow blower 20 is manually pushed forward, the rolling wheel 21 actuates a drive mechanism 60 (gears, wheels, chains, belts), which, in turn cause the brushes 56 or blades 50 to spin for removing snow or dirt. Nowhere does Townsend disclose, teach, or even remotely suggest pushing down on the handle member 38 to pivot the shoveling mechanism 40 about the axle of the wheel 21 for throwing snow. Townsend also does not disclose that its wheel axle acts as a pivot point or fulcrum for the shoveling mechanism 40. Indeed, the extra upfront weight in the Townsend snow blower 20 due to the spinning blades 50 and drive mechanism would likely make it very difficult to push the handle down with sufficient force to throw snow. This misuse of the Townsend device might even be injurious to any user attempting such a feat. Applicant respectfully submits that such use, or more specifically misuse, of the Townsend manual snow blower 20 is not sufficient to establish inherency. See MPEP Section 2112. Accordingly, Townsend does not disclose, teach, or suggest (inherently or otherwise) a wheel axle acting as a fulcrum or pivot point about which a blade can be pivoted for throwing snow or other material.

Applicant has also not found any disclosure, teaching, or suggestion in Townsend about the possible advantages associated with a wheel axle that can act as fulcrum or pivot point. In various embodiments, a wheeled shovel can be configured with a fulcrum at the wheel axle such that the wheeled shovel can operate essentially like a "seesaw" in which the operator can apply his/her own body weight to the handle for lifting and throwing snow, slush, or other materials with relatively little exertion.

Claims 2-4, 6-10, 13, 15, 18, 21-24, 27, 29, 32, 35, 38-41, 51-52, and 56-60 each ultimately depend from an independent claim shown above to be allowable. Accordingly, Applicant respectfully submits that claims 2-4, 6-10, 13, 15, 18, 21-24, 27, 29, 32, 35, 38-41, 51-52, and 56-60 are each in condition for allowance for at least the reasons given above in connection with the

independent claim from which they depend. In addition, these dependent claims are further patentably distinguishable over Townsend because Townsend does not disclose, teach or suggest the additional features required by these claims (in combination with features recited in the independent claims and any intervening claims from which they depend). For example, Townsend does not disclose, teach, or suggest:

“wherein the axle comprises a tubular body having first and second ends which support spokes connecting the axle to a rim of the wheel assembly, the tubular body forming the fulcrum member” (as recited in claim 2); or

“wherein the end portions of the axle’s tubular body support spokes connecting the axle to a rim of the wheel assembly, the tubular body forming the fulcrum member” (as recited in claim 18); or

a force applied at the handle that “is initially applied above the waist level of the operator and ends below the waist level” (as recited in claim 39); or

“wherein the height of the blade when lowered to the surface is less than the height of the axle, and wherein the height of the blade during the recoil is less than or about equal to the height of the wheel” (as recited in claim 51); or

“wherein the apparatus is configured such that the middle portion of the driving member is generally horizontal when the blade is lowered to the surface to thereby allow selective adjustment to the longitudinal positioning of the fulcrum without substantially changing the handle height relative to the surface on which the apparatus is being supported” (as recited in claim 52); or

“wherein the shovel blade has a height when lowered to the surface that is less than the height of the axle and that is less than or about equal to the height of the wheel after having picked up the material” (as recited in claim 56); or

“selectively repositioning the mounting location of the axle to the yoke” (as recited in claim 57); or

“means for selectively repositioning the attachment point of the axle to the middle portion” (as recited in claim 60).

### **REJECTIONS UNDER 35 U.S.C. § 103**

Claims 5, 11, 25, 43, 48, 49-50, and 53-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Townsend, U.S. Patent 6,163,986 in view of Armstrong, U.S. Patent 5,810,408. This rejection is respectfully traversed.

Claims 5, 11, 25, 43, 48, 49-50, and 53-55 each ultimately depend from an independent claim shown above to be allowable. Accordingly, Applicant respectfully submits that the claims 5, 11, 25, 43, 48, 49-50, and 53-55 are each in condition for allowance for at least the reasons given above in connection with the independent claim from which they depend. In addition, these dependent claims are further patentably distinguishable over the cited patents because the cited patents do not disclose, teach, or suggest the additional features required by these claims (in combination with features recited in the independent claims and any intervening claims from which they depend).

Armstrong discloses a shovel having two adjustable joints and a telescoping handle. But Armstrong does not make up for the shortcomings of Townsend in regard to those features recited by the independent claims that are not disclosed by Townsend as discussed above with regard to the 102 rejections.

In addition, there is no suggestion in either Townsend or Armstrong for their combination. Townsend addresses a manual snow plow 20 with a wheel 21 that rolls on the ground, with the rolling wheel 21 then actuating a drive mechanism 60 for spinning or rotating brushes 56 (Figure 13) or small blades 50 (Figure 1). Armstrong discloses a jointed handle 10 without wheels having interchangeable implements including a shovel blade, fork, rake, and hoe. Indeed, Armstrong appears to teach away from its combination with a wheeled apparatus because the intended uses for the Armstrong device (e.g., raking, hoeing, digging, pitch forking) require the Armstrong device to be lifted

completely off the ground such that wheels would not improve its operation but would only make the Armstrong device heavier to lift, more costly, and more cumbersome to use. Because the intended uses disclosed by Armstrong teach away from wheeled devices, Applicant respectfully submits that Armstrong is not a proper reference for combination with the wheeled snow blower of Townsend or for rejecting claims 5, 11, 25, 43, 48, 49-50, and 53-55. See MPEP § 2143.01 “The proposed modification cannot render the prior art unsatisfactory for its intended purpose”, and MPEP § 2145 “It is improper to combine references where the references teach away from their combination.”

In addition, MPEP § 2143.01 requires that there be a suggestion or motivation, either in the reference itself or in the knowledge generally available to one skilled in the art to modify or combine the references. In this regard, Armstrong does not teach or suggest that its handle design can or should be used in a wheeled hand-operated snow plough.

Furthermore, even if Townsend and Armstrong were properly combinable (which Applicant submits they are not for the reasons noted above), any logical combination would still result in subject matter different than what is claimed in claims 53-55. For example, the Armstrong handle 11 is not extendable. Instead, Armstrong’s telescoping feature 16 is applied to the lower portion of the tool, not to the handle 11. Therefore, Townsend in view of Armstrong does not disclose, teach or suggest a handle that “is adjustable through an extendable and rotatable connection to the driving member such that the handle can be slidably pulled out, slidably pushed in, and rotated relative to the driving member to thereby selectively adjust the handle height, handle length, and leverage ratio of the apparatus”, as recited in claim 54 (and claim 55 depending therefrom). In addition, the telescoping feature 16 and rotatable bend 12 in Armstrong is provided simply to accommodate different body dimensions of the users of the tool. Armstrong’s adjustability does not relate to any mechanical advantage or leverage ratio.

As another example, Townsend’s wheel 21 has a fixed connection point. And, Armstrong’s shovel does not have any wheels. Accordingly, Townsend in

view of Armstrong does not disclose, teach, or suggest the additional features recited in claim 53: “at least one sliding device attaching the axle to the middle portion of the driving member, the sliding device being slidable relative to the middle portion to thereby allow repositioning of the attachment point of the axle to the middle portion.”

The cited patents also fail to recognize the possible advantages that can be achieved in various embodiments. For example, one possible advantage is the ability to adjust the axle positioning in conjunction with an extendable/retractable handle for allowing a user to relatively easily and quickly adjust/tailor the gearing of the wheeled shovel to the user's particular body style and/or snow conditions. This ability to quickly and conveniently adjust and tailor the gearing in various embodiments of the wheeled shovel also increases the marketability and desirability for such devices.

#### **REJECTIONS UNDER 35 U.S.C. § 103**

Claims 12, 14, 26, 28, 33-34, 44, and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Townsend, U.S. Patent 6,163,986 alone. This rejection is respectfully traversed.

Claims 12, 14, 26, 28, 33-34, 44, and 45 each ultimately depend from an independent claim shown above to be allowable. Accordingly, Applicant respectfully submits that the claims 12, 14, 26, 28, 33-34, 44, and 45 are each allowable for at least the reasons given above in connection with the independent claim from which they depend. In addition, these dependent claims are further patentably distinguishable over the cited patents because the cited patents do not disclose, teach, or suggest the additional features required by these claims (in combination with features recited in the independent claims and any intervening claims from which they depend).

For example, claims 12, 26, and 33 recite the overall length of the apparatus is between about 78 inches to about 88 inches, and wherein the apparatus is configured such that its overall length can be increased to between about 89 inches to about 100 inches. As another example, claims 14, 28, and 34



recite the height of the handle from a datum plane directly under the wheel assembly is between about 48 inches to about 60 inches, and wherein the apparatus is configured such that the height of the handle from the datum plane can be adjusted to between about 42 inches to about 66 inches.

It is well established that a prima facie case of obviousness fails unless all three of the criteria set forth in MPEP § 2143 are met. A prima facie case of obviousness fails in the present instance at least because all claim limitations are not taught or suggested by the cited reference. See MPEP § 2143.03. In this regard, Applicant has not found any teaching or suggestion in Townsend to modify Townsend to satisfy each and every feature of claims 12, 14, 26, 28, 33-34, 44, and 45 (in combination with features recited in the independent claims and any intervening claims from which they depend). Absent such teaching or suggestion, the present rejection cannot be sustained against claims 12, 14, 26, 28, 33-34, 44.

Applicant respectfully submits that the obviousness rejections fail to show proper motivation to make a modification to Townsend (e.g., modifying the dimensions), which is an omission of an essential element needed for a prima facie Obviousness rejection. It is insufficient to establish obviousness that separate elements of the invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the elements or references. *Ruiz v. A.V. Chance Co.*, 57 USPQ2d 1161, 1167 (Fed Cir 2000). The court noted "the best defense against the subtle but powerful attraction of hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references". *Id.* In *Ruiz*, the court concluded there were no findings of a disadvantage in prior foundation underpinning systems, such that the "nature of the problem" would have motivated a person of ordinary skill to combine the prior art references to suggest the claimed invention on a method of underpinning employing screw anchors. *Id.* at 1163, 1168.

It is believed that the Office Action merely asserts that the dimensions recited in claims 12, 14, 26, 28, and 33-34 are obvious matters involving only

routine experimentation, and inadvertently relies on impermissible hindsight-based obviousness analysis. As such, Applicant respectfully submits that claims 12, 14, 26, 28, and 33-34 are not obvious in view of Townsend, and are allowable for at least the above reasons. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections of claims 12, 14, 26, 28, 33-34.

Furthermore, the specification notes that for various embodiments, the overall length of the apparatus and handle height are related to the fulcrum of the snow shovel about a single wheel assembly that provides for compressing the wheel assembly under a downward force applied at the handle and that then provides a recoil to provide an upward and forward force for propelling the contents from the blade. See, for example, FIGS. 4-6 and paragraphs [0032], [0033] and [0034] of the application as published under U.S. Patent Application Publication No. 2005/0160633. These figures and paragraphs relate to the forces and relationship between these forces and the lengths to provide the upward and forward force at the blade to propel the contents in response to the downward movement of the handle. One skilled in the art would not modify Townsend through routine experimentation or otherwise to have the lengths of 78 inches to about 88 inches, that can be increased to between about 89 inches to about 100 inches or to have a handle height of between about 48 to 60, without the use of impermissible hindsight in viewing the present disclosure that provides for throwing the load using a fulcrum at a wheel axle (instead of rotating or spinning blades or brushes as in Townsend's snow blower). As such, having the lengths as recited by claims 12, 26, and 33 and the heights as recited by claims 14, 28 and 34 would not have been obvious or a matter of routine experimentation to one skilled in the art when only viewing Townsend and not having the benefit of the insight and novel solutions presented in the current disclosure.

Further, it would not be an easy or simple task to alter the dimensions of the Townsend device because such alterations would have implications on other design parameters. For example, adjusting one dimension of the Townsend design (e.g., the overall length or height, etc.) would have consequences and

require constraints and tradeoffs with the dimensions of the other design parameters, and, accordingly, one could not simply change all of the various dimensions of the Townsend device to come up with the dimensions recited in claims 12, 14, 26, 28, 33, and 34.

#### **ALLOWED CLAIMS**

Claims 19, 20, 37, 46, and 47 are allowed

#### **NEW CLAIMS**

New claims 61 and 62 are supported by the application as originally filed. Accordingly, no new matter is introduced by the addition of claims 61 and 62.

New claims 61 and 62 each depend from independent claim 1 shown above to be allowable. Accordingly, Applicant respectfully submit that claims 61 and 62 are each in condition for allowance for at least the reasons given above in connection with the independent claim from which it depends.

In addition, claims 61 and 62 are further patentably distinguishable over Townsend and Armstrong because these patents do not disclose, teach or suggest the additional features recited by claims 61 and 62 (in combination with the features recited in independent claim 1):

“wherein the handle is adjustable through an extendable connection to the driving member such that the handle can be slidably extended or slidably retracted relative to the driving member to thereby selectively adjust the handle height, handle length, and leverage ratio of the apparatus, whereby the handle positioning can be adjusted in coordination with the adjustment to the axle longitudinal positioning to substantially maintain the leverage ratio of the apparatus” (as recited in claim 61); or

“wherein the handle is adjustable through a rotatable connection to the driving member such that the handle can be rotated relative to the driving member to thereby selectively adjust

the handle positioning and leverage ratio of the apparatus" (as recited in claim 62).

Even if Townsend and Armstrong were properly combinable (which Applicant submits they are not for the reasons noted above), any logical combination would still result in subject matter different than what is claimed in claims 61 and 62. For example, the Armstrong handle 11 is not extendable. Instead, Armstrong's telescoping feature 16 is applied to the lower portion of the tool, not to the handle 11. In addition, Armstrong's telescoping feature 16 and rotatable bend 12 are provided simply to accommodate different body dimensions of the users of the tool. Armstrong's adjustability does not relate to any mechanical advantage or leverage ratio.

### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned directly at 314-726-7502.

Applicant believes that the appropriate fees have been included with this filing.s If, however, Applicant owes any additional fee(s), the Commissioner is hereby authorized to charge the fee(s) to Deposit Account No. **08-0750**. In addition, if there is ever any other fee deficiency or overpayment under 37 C.F.R. §1.16 or 1.17 in connection with this patent application, the Commissioner is hereby authorized to charge such deficiency or overpayment to Deposit Account No. **08-0750**.

Respectfully submitted,

By:



Anthony G. Fussner  
Reg. No. 47,582

Dated: March 29, 2006

HARNESS, DICKEY & PIERCE, P.L.C.  
7700 Bonhomme, Suite 400  
Clayton, MO 63105  
(314) 726-7500  
(314) 726-7501 (facsimile)  
[AGF/dmkd]